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DATA CENTER OPERATIONS BRANCH

NDS OPERATIONS PROCEDURE MANUAL  
NO. P-H007

APPLICATIONS SOFTWARE  
13 April 1983

HISTORICAL AREA COVERAGE  
TAPELOAD

SYMBOLIC TITLE: HACTAPELOAD  
PROGRAMMER:

25X1

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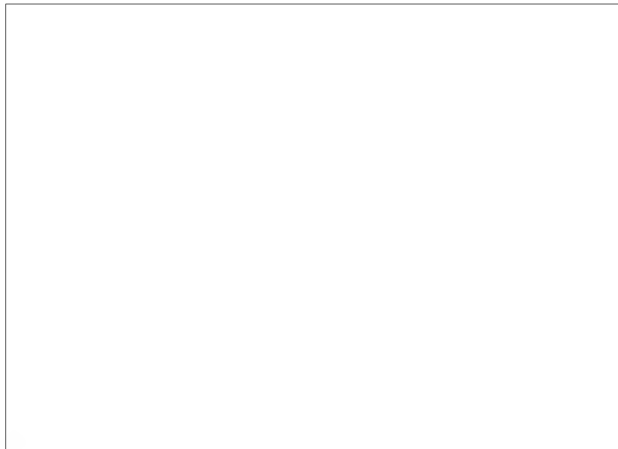
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Program HACTAPELOAD

Date 6 November 1981

APPROVALS

This operations manual has been reviewed and approved by the following persons:



25X1

00 APR 82  
(date)

9 APR 82  
(date)

TOP SECRET

25X1

TOP SECRET

Date 6 November 1981

## CONTENTS

	<u>Page</u>
SUMMARY	1
OPERATIONAL FLOW CHART	2
COMPUTER RUN PREPARATION	3
PUNCHED CARD INPUT	3
SAMPLE CARD DECK	5
MAGNETIC TAPE INPUT	6
INPUT TAPE FORMAT	9
HIGH-SPEED PRINTER OUTPUT	10
PROGRAM LOADING	11
ON-LINE COMPUTER PROCESSING	12
EQUIPMENT REQUIREMENTS	12
NORMAL RUN INSTRUCTIONS	13
ABNORMAL RUN INSTRUCTIONS	14

TOP SECRET

TOP SECRET

Program HACTAPELOAD

Date 30 November 1982

SUMMARY

The HACTAPELOAD program will load or modify the HAC data base with [ ] 25X1  
[ ] The program provides the capability of adding or deleting 25X1  
any mission. The program provides detailed statistical information of frame and  
strip counts for each new mission loaded.

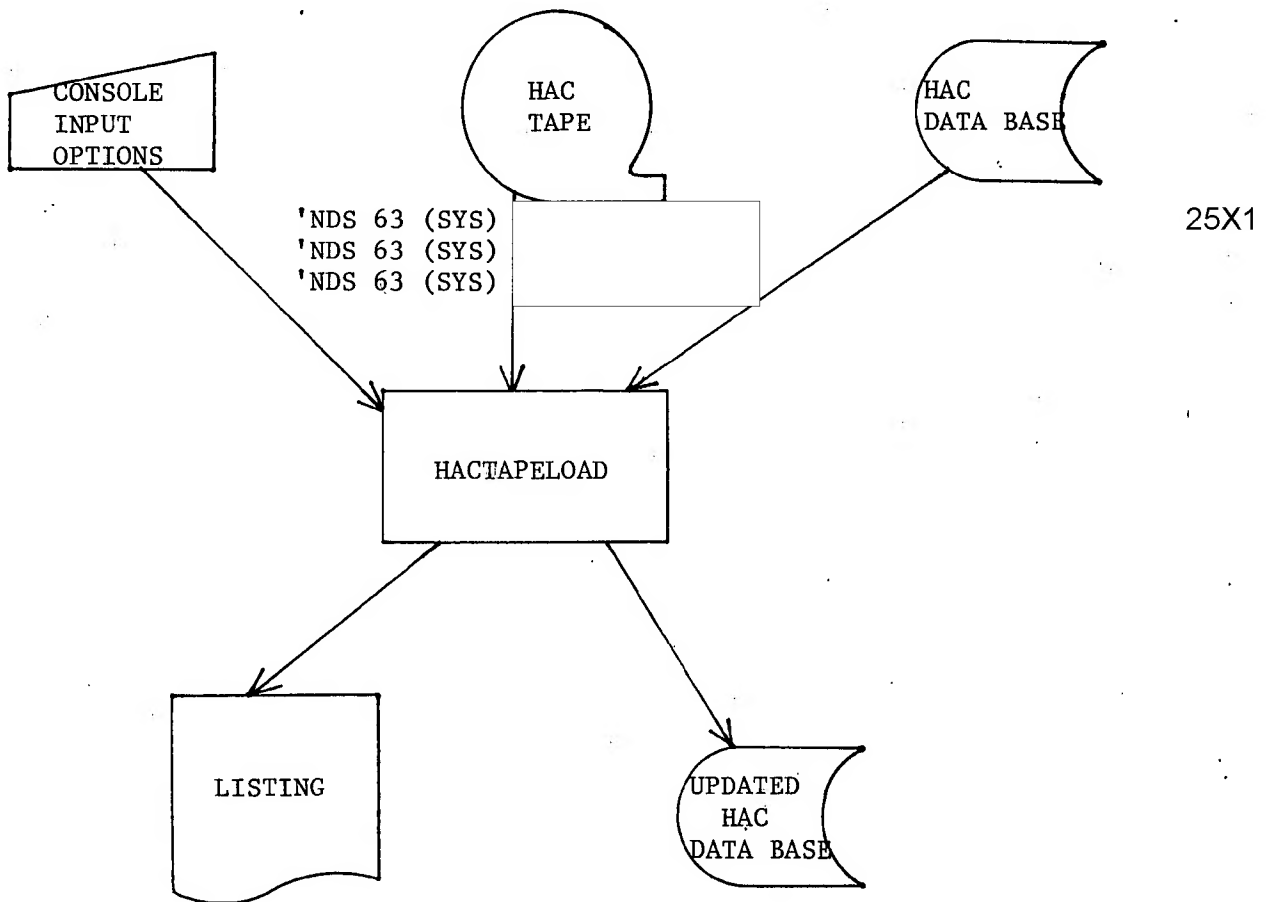
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Program HACTAPELOAD

Date 30 November 1982

OPERATIONAL FLOW CHART



TOP SECRET

Program HACTAPELOADDate 30 November 1982

## COMPUTER RUN PREPARATION

## PUNCHED CARD INPUT

The HACTAPELOAD program provides the user/operator with the capabilities to ADD and/or DELETE a mission. A description of each option is listed below. The input deck and options are provided by the user for each run.

ADD OPTION

The ADD option will add any mission requested into the HAC data base that does not already exist. The data base is capable of storing up to 10 missions:

3 missions for	<input type="text"/>	25X1
3 missions for		
7 missions for		(these are added or deleted by months)

If the user wishes to add a mission and no slot is available or that mission already exists, he must first delete a corresponding  mission by using the DELETE option of HACTAPELOAD. Each mission stored in the HAC data base has an associated code called the HAC code. The HAC codes are

25X1  
25X1

A data card is required to ADD a mission. This card will consist of the HAC code and mission number to be added. The format for this card is:

Column 1 = HAC code (A-Z)	<input type="text"/>	25X1
Column 2-6 = mission number		
Column 7-9 = <u>ADD</u> (add)		

'FEB82')

DELETE OPTION

The DELETE option of the HACLOAD program will delete any existing mission from the HAC data base. The user/operator must specify which mission and HAC code to delete on the option card. The format for the delete option card is:

Column 1 = HAC code (A-Z)
Column 2-6 = Mission Number Ex. '4350W' or '1215W' or 'FEB82')
Column 7-9 = DEL (delete)

OPTION USES

The ADD and DEL options can be combined in the deck and used in any combination. Typically, when you are adding a mission, you will also have to delete an old mission to make room for the new. It is the responsibility of the user to manage the missions on the file.

TOP SECRET

Program HACTAPELOAD

Date 30 November 1982

PUNCHED CARD INPUT (Continued)

DATA BASE INPUT

The following HAC data base records are used by the HACTAPELOAD program.

Record Name

HAC-OWN  
HAC-MISS-OWN  
HAC-SQR  
HAC-SQR-OF

TOP SECRET

**TOP SECRET**Program HACTAPELOADDate 30 November 1982**SAMPLE CARD DECK**

```

1:@RUN      HACTAP,S33741016/DEFENB,XMS
2:@SYM,D PRINT$
3:@DELFTC,C XMS*B-HACTPLD.
4:@USE E-HACTPLD.,XMS*B-HACTPLD.
5:      @ASG,UP XMS*B-HACTPLD.,F///256
6:@CAT,P B-HACTPLD.,F///256
7:@ASG,A B-HACTPLD.
8:@PERKET PRINT$/E-HACTPLD
9:@ASG,A XMS*W$ABS.
10:@COPY,A XMS*W$ABS.HACTAPELOAD,TPF$.
11:@FREE,R XMS*W$ABS.
12:@MSG,W PLEASE USE TAPE NUMBER 1763 FOR HAC11-TAPE
13:@MSG      ***** THANKS.
14:@ASG,T HAC11-TAPE,U9V////////8
15:      . NOTE THIS MUST ASS HAC11-TAPE WHETHER
16:      . THIS WILL NOT AFFECT RUNS FOR 8 OR 9 MISSIONS
17:@XQT      HACTAPELOAD
18:@SEP82ADD,
19:@PMD,PALE
20:@PERKET PRINT$
21:      . @SYM B-HACTPLD.1,FR
22:@SYM,D PRINT$
23:@FIN

```

25X1

5  
**TOP SECRET**



TOP SECRET

Program HACTAPELOADDate 30 November 1982

## MAGNETIC TAPE OUTPUT

Contents and Description of Tape Data

If the user selected the ADD or DELETE option the HACTAPELOAD program will load or delete that mission using the  input tape.

25X1

Unit

9-Track

Standard Tape Label: 'NDS 63 (SYS)  MMMM-N'  
(to be inserted by programmer)

---

25X1

Label Block File Name: N/A

Mode: 1600 BPI

Code: ASCII

Record and Block Size: 80 characters per record, 400 records per block

File Sequence:

Source Component:

Disposition: Tape Library

Retention Period:

Restrictions:

Quantity:

6  
TOP SECRET

TOP SECRET

Program HACTAPELOADDate 30 November 1982

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TOP SECRET

TOP SECRET

Program HACTAPELOADDate 30 November 1982

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Restrictions:

Quantity:

TOP SECRET

TOP SECRET

Date 6 November 1981

## INPUT TAPE FORMAT

<u>Field</u>	<u>Field size</u>
mission	pic 9(4)
bucket	pic 9
pass	pic 9(4)
frame	pic 9(4)
blank	pic 9(3)
*corner point 1	
LAT	pic S99V999
LON	pic S999V999
*corner point 2	
LAT	pic S99V999
LON	pic S999V999
*corner point 3	
LAT	pic S99V999
LON	pic S999V999
*corner point 4	
LAT	pic S99V999
LON	pic S999V999

TOP SECRET

Program HACTAPELOAD

Date 30 November 1982

HIGH-SPEED PRINTER OUTPUT

Identification: HACLD

Format:

Type of Form: 1471-1 pt.

Disposition: Send to requester.

The output created by the HACTAPELOAD program will consist of the up-dated HAC data base and a summary listing. This summary listing will include totals of frames/strips loaded and any diagnostic error messages the program may have encountered. Each message with its description and cause is listed in the normal/abnormal message section of this document. If the user/operator elected to use the HACDUMP absolute following the HACTAPELOAD execution, data will be listed out showing each HAC-SQR with its frames and strips. Usually, HACDUMP will be requested as a separate run if there is some evidence of a problem with the HAC data base.

Program HACTAPELOAD

Date 30 November 1982

PROGRAM LOADING

Type of Program: BATCH

Start Keyin:

Run ID:

DMR ID:

ECRT:

General Equation -

Sample Estimate -

FINAL CHECK SUMMARY

The following list defines the requirements that must be satisfied prior to executing the HACTAPELOAD program.

1. HAC data base file
2.  input tape
3. HACTAPELOAD card deck

25X1

rogram HACTAPELOAD

25X1

Date 30 November 1982

ON-LINE COMPUTER PROCESSING

EQUIPMENT REQUIREMENTS

Computer: UNIVAC 1100/84

Schema Used:

Storage:

Core Required -

I Bank -

D Bank -

Peripheral Devices: 9-Track UNISERVO, High-Speed Printer, Operator's Console, and Card Reader

Restrictions:

Files Accessed:

Files Created/Deleted:

File Size:

Approximate Number of Accesses:

Date 30 November 1982

## NORMAL RUN INSTRUCTIONS

Initiation: Card Deck

Monitor:

Message	Cause	Operator Action
'MISSION TO BE ADDED _____'	Displays which mission will be added	None
'MISSION TO BE DELETED _____'	Displays which mission is to be deleted	None
'SUCCESSFUL DELETE OF MISSION _____'	Mission was deleted successfully	None
'TOTAL FRAMES _____' 'TOTAL SQUARES _____'	Number of frames and HAC-SQR records that were stored	None
'**HAC-OWN**' 'ACT-MISS-CNT: _____' 'RET-MIS-CNT: _____' 'ACT-HAC-CODE (I): _____' 'REV-MISS-ID: _____'	Contents of HAC-OWN HAC-MISS-OWN records	None
'**HAC-MISS-OWN**' 'TOT QUERY: _____' 'TOT-FRM-CNT: _____' 'TOT-SQR-CNT: _____' 'LAST-REF: _____'	Contents of a HAC-MISS-OWN record	None
'**HAC-SQR**' 'FRM-TOT-CNTS: _____' 'FRM-OCC-CNT1: _____' 'PASS: _____-FRAM-VUM: _____' 'CAM: _____' 'CORN-LAT: _____' 'CORN-LON: _____' 'CORN-LAT: _____' 'CORN-LON: _____' 'CORN-LAT: _____' 'CORN-LON: _____'	Contents of a HAC-SQR record	None



rogram HACTAPELOADDate 30 November 1982

SECRET

## ABNORMAL RUN INSTRUCTIONS

Messages: \*\*\*DATA BASE ERRORS\*\*\*

<u>Message</u>	<u>Cause</u>	<u>Operator Action</u>
'ERROR ON IMPACT'		Notify PB/DBS
'OPEN ERROR ON HAC AREAS'		Notify PB/DBS
'COULD NOT STORE HAC-OWN'		Notify PB/DBS
'ERROR FINDING HAC-OWN'		Notify PB/DBS
'ERROR FINDING HAC-MISS-OWN'		Notify PB/DBS
'ERROR DELETING HAC-SQR'		Notify PB/DBS
'ERROR FETCHING NEXT HAC-SQR RECORD'		Notify PB/DBS
'ERROR DELETING HAC-MISS-OWN'		Notify PB/DBS
'COULD NOT ADD MISSION _____'		Notify PB/DBS
'ERROR ON MODIFY OF HAC-OWN RECORD'		Notify PB/DBS
'ERROR STORING HAC-MASS-OWN'		Notify PB/DBS
'ERROR FETCHING HAC-SQR'		Notify PB/DBS
'ERROR MODIFYING HAC-SQR'		Notify PB/DBS
'ERROR STORING HAC-SQR'		Notify PB/DBS
'ERROR FETCHING LAST HAC-SQR-OF'		Notify PB/DBS
'ERROR MODIFYING LAST HAC-SQR-OP'		Notify PB/DBS
'ERROR MODIFYING HAC-MISS-OWN'		Notify PB/DBS
SYSTEM ROLLED BACK	System rollback caused by an abnormal DMS error	Notify PB/DBS
HACLOAD PROGRAM	System rollback caused by an abnormal DMS error	Notify PB/DBS

TOP SECRET

Date 30 November 1982

## ABNORMAL RUN INSTRUCTIONS (Continued)

Messages: \*\*\*OPTION CARD ERRORS\*\*\*

<u>Message</u>	<u>Cause</u>	<u>Operator Action</u>
'INVALID OPTION CODE IN RUNDECK'	Option code was not 'ADD' or 'DEL'	Return to requestor
'INVALID MISSION ON CARD'	Mission number not valid	Return to requestor
INVALID PARAMETER CARD IN RUN 'DECK'	Runstream or card deck must have a parameter card	Return to requestor
INCORRECT CODE/ MISSION IN RUN DECK, NO DELETE	Mission or HAC code specified for a delete is invalid	Return to requestor
'CODE AND MISSION IN HAC DATABASE IS: NOT INCORRECT CODE/MISSION IN RUN CARD		Return to requestor

TOP SECRET

rogram HACTAPELOADDate 30 November 1982

## ABNORMAL RUN INSTRUCTIONS (Continued)

Messages: \*\*\*LOGIC ERRORS\*\*\*

MessageCauseOperator ActionMISSION NOT IN  
HAC-OWN RECORD,  
HAC-SQRS DELETEDThe mission  
existed in the  
data base but was  
not stored in the  
HAC-OWN array

Notify PB/DBS

'ID MISSIONS ALREADY  
IN MISS-OWN RECORD  
DATABASE FULL, MUST  
DELETE A MISSIONThe HAC data base  
file is full, a  
mission must be  
deleted first

Notify PB/DBS

'MUST DELETE A

The HAC data base  
file is full, a  
mission must be  
deleted first

Notify PB/DBS

FOUND IN DATABASE,  
MAX ALLOWED 6''COULD NOT READ INPUT  
TAPE'Tape error  
Error in  
geographic

Notify PB/DBS

'LAT1        LON1       '  
'LAT2        LON2       ''LAT3        LON3       '  
'LAT4        LON4       'Calculations  
of coords.

Notify PB/DBS